

KCC 4921 (K-C 16,163)  
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REMARKS

Pursuant to the Examiner's suggestion, Claim 24 has been amended herein in this Amendment B to be in independent form. Support for amended Claim 24 can be found in original claim 1, and further, in the specification on page 7, lines 14-21 and on page 10, lines 7-13. Also, claim 31 has been amended herein to overcome the Section 112 rejection. After entry of this Amendment B, claims 24-33 and claims 70-82 will be pending in this case. No new matter has been added by these amendments. Applicants respectfully request reconsideration and allowance of all pending claims.

1. Claim Objections (§12)

As noted above, claim 24 has been amended herein to be in independent form. As such, it is respectfully requested that the claim objection relating to claim 24 be withdrawn.

2. Rejection of Claim 31 Under 35 U.S.C. §112, Second Paragraph (§13-5)

Reconsideration is requested of the rejection of claim 31 under 35 U.S.C. §112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 31 has been amended herein to require a laminated structure comprising a first layer attached to a second layer wherein the first and second layer comprise a single material. The single material is folded over onto itself and adhesively bonded.

Support for this amendment can be found on page 24, lines 12-17 of the specification. At lines 14-17, the specification states that a laminated structure may comprise a single material which is folded over onto itself and adhesively bonded.

KCC 4921 (K-C 16,163)  
PATENT

3. Rejection of Claims 24 and 31-33 Under 35 U.S.C. §102(a)  
(¶¶6-7)

Reconsideration is requested of the rejection of claims 24 and 31-33 under 35 U.S.C. §102(a) as being anticipated by Tanzer (WO 01/15646).

Claim 24, as amended, is directed to a laminated structure comprising at least a portion of a first layer attached to at least a least a portion of a second layer using an adhesive composition. The adhesive composition comprises an atactic polymer having a degree of crystallinity of less than about 20% and a number-average molecular weight between about 1,000 and about 300,000 and an isotactic polymer having a degree of crystallinity of at least about 40% and a number-average molecular weight between about 3,000 and about 200,000.

Tanzer discloses an absorbent composite comprising a selectively stretchable liquid permeable first substrate layer, a selectively stretchable second substrate layer and pockets of superabsorbent material formed between the first layer and second layer.<sup>1</sup> The pockets are defined by attachment means which serves to join the first and second layers to form a laminate. Suitable attachment means include water sensitive adhesives.<sup>2</sup> Optionally, a secondary attachment means which is water insensitive may be employed to secure the layers. Suitable secondary attachment means are not disclosed.

Significantly, Tanzer fails to disclose the adhesive composition of amended claim 24 which comprises an atactic polymer having a degree of crystallinity of less than about 20% and a

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<sup>1</sup>Tanzer specification at page 6, lines 1-5.

<sup>2</sup>See Tanzer specification at page 6, lines 15-20.

KCC 4921 (K-C 16,163)  
PATENT

number-average molecular weight between about 1,000 and about 300,000, and an isotactic polymer having a degree of crystallinity of at least about 40% and a number-average molecular weight between about 3,000 and about 200,000. This is a requirement of amended claim 24 and is a significant aspect of Applicants' invention.

As stated in M.P.E.P. § 2131, a claim is anticipated only if each and every element of the claim is described in the prior art reference. Because Tanzer fails to disclose a laminated structure comprising a first layer attached to a second layer using an adhesive composition comprising an atactic polymer having a degree of crystallinity of less than about 20% and a number-average molecular weight between about 1,000 and about 300,000; and an isotactic polymer having a degree of crystallinity of at least about 40% and a number-average molecular weight between about 3,000 and about 200,000, Tanzer does not disclose each and every element of amended claim 24. As such, the Tanzer reference does not anticipate claim 24, and claim 24 is patentable.

Claims 31-33 depend from claim 24 and are patentable for the same reasons as claim 24 set forth above, as well as for the additional elements they require.

4. Rejection of Claims 25-30 Under 35 U.S.C. §102(e) or 103(a) (¶9)

Reconsideration is requested of the rejection of claims 25-30 under 35 U.S.C. §102(e) as being anticipated by or, in the alternative, under 35 U.S.C. §103(a) as obvious over Tanzer (WO 01/15646).

Claims 25-30 depend from claim 24 and are patentable for the same reasons as claim 24 set forth above, as well as for the additional elements they require.

KCC 4921 (K-C 16,163)  
PATENT

Applicants request reconsideration of the rejection of claims 25-30 under 35 U.S.C. §103(a) as being obvious over Tanzer.

Because claims 25-30 depend from claim 24, they require each and every element set forth in claim 24. As noted above, claim 24, as amended herein, requires that the adhesive composition comprise an atactic polymer having a degree of crystallinity of less than about 20% and a number-average molecular weight between about 1,000 and about 300,000, and an isotactic polymer having a degree of crystallinity of at least about 40% and a number-average molecular weight between about 3,000 and about 200,000. As noted above, Tanzer fails to disclose these elements and, as such, claims 25-30 cannot be said to be anticipated by Tanzer.

Turning now to the obviousness rejection of claims 25-30 based on Tanzer, the Office claims that static-peel-failure times and relative accretion values are obviously present once the Tanzer absorbent product is provided.

As noted in M.P.E.P. §2142, in establishing obviousness, the Office must show a reference that teaches all of the claimed limitations along with some motivation or suggestion, either in the reference or in knowledge generally available to one skilled in the art, to modify the reference and arrive at the claimed subject matter. As further set forth in M.P.E.P. §2143.01, obviousness can only be established by modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either explicitly or implicitly in the reference itself, or in the knowledge generally available to one of ordinary skill in the art. Applicants assert that such motivation to modify the Tanzer reference is lacking in

KCC 4921 (K-C 16,163)  
PATENT

this case<sup>3</sup>, as there is no teaching or suggestion to use an adhesive composition as required by the rejected claims. Additionally, and significantly, the cited reference cannot make the pending claims obvious as it fails to show each and every element of the claim.

Additionally, as set forth in M.P.E.P. § 2143.03, if any independent claim is nonobvious under 35 U.S.C. §103, then any claim depending therefrom is nonobvious. Applicants assert that this is such a situation; and thus, the additional limitations of static-peel-failure times and relative accretion values need not be discussed, as independent claim 24 (upon which claims 25-30 depend), herein amended and directed to a laminated structure comprising at least a portion of a first layer attached to at least a second layer using an adhesive composition comprising an atactic polymer having a degree of crystallinity of less than about 20% and a number-average molecular weight between about 1,000 and about 300,000, and an isotactic polymer having a degree of crystallinity of at least about 40% and a number-average molecular weight between about 3,000 and about 200,000, is not obvious over the Tanzer reference.

5. Rejection of Claims 70-72 Under 35 U.S.C. §103(a) (¶10)

Reconsideration is requested of the rejection of claims 70-72 under 35 U.S.C. §103(a) as being unpatentable over Tanzer (WO 01/15646) in view of Wang (U.S. 6,329,468) and Hall et al. (U.S.

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<sup>3</sup>M.P.E.P. §2143.03 provides that for the Office to establish the obviousness of a claim, it must show that all of the claim limitations are taught or suggested by the cited prior art. Applicant asserts that all of the claim limitations of claim 24, upon which claims 25-30 depend are not taught, or suggested, by the Tanzer reference, as noted above.

KCC 4921 (K-C 16,163)  
PATENT

3,370,106).

Claim 70 is directed to a laminated structure comprising a first neck-bonded laminate substrate and a second neck-bonded laminate substrate. The first neck-bonded laminate substrate is bonded to said second neck-bonded laminate substrate with an adhesive composition comprising an atactic polymer having a degree of crystallinity of less than about 20% and a number-average molecular weight of from about 1,000 to about 300,000 and an isotactic polymer having a degree of crystallinity of at least about 40% and a number-average molecular weight of from about 3,000 to about 200,000.

Tanzer is discussed above.

As noted by the Office, Tanzer fails to teach that any optional water insensitive attachment means is an adhesive composition comprising an atactic polymer having a degree of crystallinity of less than about 20% and a number-average molecular weight of from about 1,000 to about 300,000 and an isotactic polymer having a degree of crystallinity of at least about 40% and a number-average molecular weight of from about 3,000 to about 200,000 as required by claim 70. In an attempt to find each and every element of claim 70 as required by the M.P.E.P. for a determination of *prima facie* obviousness, the Office cites the Wang and Hall et al. references for combination with Tanzer.

Wang discloses a flexible polyolefin-based hot-melt adhesive composition useful in bonding nonwoven fabrics and elastic attachment applications in nonwoven disposable absorbent articles. The composition comprises a flexible polyolefin polymer, a tackifier resin, a plasticizer, and optionally a wax and a stabilizer. At most, the composition is 40% flexible polyolefin.

In contrast to the predominantly isotactic chain configuration

KCC 4921 (K-C 16,163)  
PATENT

of isotactic polypropylene and the predominantly atactic chain configuration of atactic poly-alpha olefins, Wang's flexible polyolefin polymer for use in the adhesive is a blended polymer comprised of segments or blocks of regular isotactic structures that are interspersed by segments or blocks of atactic structures. Due to this configuration, Wang's flexible polyolefins are semi-crystalline with a crystallinity and melting point below those of isotactic polypropylene. The molecular structure of the flexible polyolefin leads to an unusual and desirable combination of physical and mechanical properties such as low density, low melting point, flexibility, softness and elasticity.

Wang fails to disclose or suggest the required crystallinity values for the adhesive composition as set forth in claim 70 and fails to disclose or suggest the required molecular weights for the adhesive composition as set forth in claim 70. These are required elements of claim 70 and are significant aspects of applicants' invention. Wang's hot-melt adhesive comprises a blended polymer made up of segments or blocks of regular isotactic structure that are interspersed by segments or blocks of atactic structure. Wang's hot-melt adhesive is not prepared utilizing two separate polymers, one atactic, and one isotactic, but comprises a single, blended polymer. This is a significant difference as compared to the requirement of claim 70.

Hall, et al. disclose a hot-melt adhesive suitable for bonding two materials together such as a corrugated paper medium and a 50-pound kraft paper facer sheet to produce corrugated paper board. The hot-melt adhesive is also suitable for the fabrication of paper cartons<sup>4</sup>. The adhesive composition comprises 60 to 95 weight

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<sup>4</sup>In column 1, lines 36-38 Hall Jr., et al. disclose that the hot-melt adhesive composition may be used for bonding wood,

KCC 4921 (K-C 16,163)  
PATENT

percent atactic polypropylene and 5 to 40 weight percent polyethylene or isotactic polypropylene. The atactic polypropylene has a molecular weight of 15,000 to 60,000 and the isotactic polypropylene has a molecular weight of up to about 500,000, and preferably 85,000 to 95,000.

Hall, et al. fail to disclose neck-bonded laminates as required by claim 70. Regardless of whether the combination of the Tanzer, Wang, and Hall, et al. references shows each and every element of claim 70<sup>5</sup>, such a combination is improper as discussed herein and cannot properly be made to reject claim 70, or any other pending claims.

In establishing a *prima facie* case of obviousness to render a claim unpatentable, M.P.E.P. §2142 requires, *inter alia*, that the Office must show some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to combine reference teachings to arrive at applicants' claim. The mere fact that references can be combined or modified to arrive at the claimed subject matter does

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paper, plastics, textiles, and other materials. As discussed more fully below, this reference fails to suggest or disclose that the disclosed adhesive composition could be used to bond a first neck-bonded laminate to a second neck-bonded laminate as required by claim 70.

<sup>5</sup>Applicants note that the Office states that it would have been obvious to one of ordinary skill in the art at the time the invention was made to employ the hot melt adhesive of Hall et al. as the hot melt composition in the laminate of Tanzer in view of Wang motivated by the desire to produce a hot melt adhesive with excellent properties for the use in textile bonding. Applicants assert this logic is flawed as discussed herein as a reading of Wang, as relied upon by the Office, clearly would have guided one skilled in the art away from using the Hall et al. adhesive in a disposable laminated product.



KCC 4921 (K-C 16,163)  
PATENT

not render the resultant combination obvious, unless the prior art also suggests the desirability of the combination. *In re Mill*, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990). A close reading of the references clearly indicates that one skilled in the art would not have been so motivated and, without Applicants' disclosure as a blueprint (which the Office had the benefit of utilizing), such a combination of the Tanzer, Wang, and Hall et al. references would not have been made.<sup>6</sup>

Significantly, M.P.E.P. §2143.01 requires that where the teachings of the prior art conflict, the Office must weigh the suggestive power of each reference; the test for obviousness is what the combined teachings of the references would have suggested to one of ordinary skill in the art, and all teachings in the prior art must be considered to the extent that they are in analogous arts. Where the teachings of two or more prior art references conflict, the Office must weigh the power of each reference to suggest solutions to one of ordinary skill in the art, considering the degree to which one reference might accurately discredit another. A close reading of Wang clearly indicates that one skilled in the art would be guided away from combining the Wang and Hall et al. references to arrive at Applicants' invention.

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<sup>6</sup>M.P.E.P. §2142 further provides that in order to reach a proper determination under 35 U.S.C. 103, the Examiner must step backward in time and into the shoes worn by the hypothetical "person of ordinary skill in the art" when the invention was unknown and just before it was made. Knowledge of applicants' disclosure must be put aside in reaching this determination, yet kept in mind in order to determine the "differences." The tendency to resort to "hindsight" based upon applicants' disclosure is often difficult to avoid due to the very nature of the examination process. However, impermissible hindsight must be avoided and the legal conclusion must be reached on the basis of the facts gleaned from the prior art.

KCC 4921 (K-C 16,163)  
PATENT

As noted above, Wang simply teaches the use of a single block blend polymeric material (referred to as a flexible polyolefin) which has segments or blocks of regular isotactic structure that are interspersed by segments or blocks of atactic structure, along with at least two other components. Noting that the flexible polyolefin has a "unique" molecular structure, Wang notes numerous improvements as compared to conventional atactic and isotactic polymers (which are disclosed by Hall et al. and specifically relied upon by the Office). Additionally, and critically, Wang discusses, in numerous paragraphs in columns three and four, the shortcomings and limitations of hot-melt adhesives comprising atactic and isotactic polymers in place of the flexible polyolefins. For example, in column 3, lines 37-47 Wang states that hot-melt adhesives comprising atactic polypropylene generally have poor cohesive strength, poor heat resistance, low elevated temperature peel and low shear values. Significantly, Wang further states:

"[Atactic polypropylenes] have not found much use in disposable nonwoven applications where a combination of high bond strength at very low coating weight and easy processability by spray techniques mentioned above is required. [Atactic polypropylene] based adhesives usually lack such capability" Column 3 lines 42-47.

Further, at column 4 lines 13-19 Wang states:

"As noted above, [atactic polypropylenes] differ significantly from [flexible polyolefins] used in

KCC 4921 (K-C 16,163)  
PATENT

the present invention in both molecular structure, average molecular weight, physical and mechanical properties. These prior art [atactic polypropylenel adhesives are formulated for applications other than for disposable nonwovens products and usually lack sprayability. Emphasis added.

Additionally, at column 4 lines 55-60 Wang states:

"The compositions of the present invention have overcome the shortcomings of the prior art amorphous poly-alpha-olefins and block copolymer based adhesives and provide excellent heat stability, improved cohesive strength, low viscosity, and good adhesion to a variety of substrates and good processability with conventional coating equipment."

One skilled in the art and reading the Wang reference would actually be taught or guided away from utilizing the adhesive composition set forth in claim 70 of the present invention and from looking at any reference that suggests or teaches a combination of atactic polypropylene and isotactic polypropylene as Hall et al. do.<sup>7</sup> Wang clearly sets forth the shortcomings of hot-melt adhesives comprising isotactic polypropylene and atactic

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<sup>7</sup>Applicants note that a prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention. *W.L. Gore & Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983).

KCC 4921 (K-C 16,163)  
PATENT

polypropylene and specifically states that such compositions are formulated for applications other than for disposable nonwoven products because such compositions lack basic characteristics required for suitable use, such as thermal stability and cohesive strength. Because Wang teaches squarely away from the teachings in Hall et al. of a hot-melt adhesive comprising atactic polypropylene, one skilled in the art would not, and could not, have been properly motivated to look at the Hall et al. reference after reading the Wang reference. With all due respect, it appears that the Office has used improper hindsight analysis and reconstruction when combining the Tanzer reference with the Wang and Hall et al. references. The Federal Circuit has repeatedly cautioned against hindsight analysis and held that such practice is improper. Grain Processing Corp. v. American-Maize-Products, Co., 840 F.2d 902, 904 (Fed. Cir. 1988).

In addition to the lack of motivation to combine the references, the Hall et al. reference is not relevant to claim 70. Hall et al. fail to disclose any hot-melt adhesive compositions suitable for bonding two neck-bonded laminate substrates as required by claim 70. As noted above, Hall et al. direct their hot-melt adhesive to bonding two materials such as corrugated paper and kraft paper. Additionally, Hall et al. use their hot-melt adhesive to fabricate paper cartons. A close reading of the examples reveals that the hot-melt adhesive is intended for use with kraft paper, a heavy paper product.

In trying to show the relevance of the Hall et al. reference to claim 70, which requires the hot-melt adhesive to bond a first and second neck-bonded laminate substrate, the Office states that Hall et al. do disclose that the hot-melt adhesive disclosed therein is suitable for textile use. The Office is apparently

KCC 4921 (K-C 16,163)  
PATENT

equating the term "textile" as used by Hall et al. to a neck-bonded laminate substrate to show the relevance of the Hall et al. reference:

"It would have been obvious to one of ordinary skill in the art at the time the invention was made to employ the hot-melt adhesive composition of Hall et al... specifically for use in textile bonding applications." See Office Action, Paragraph 10.

The products as disclosed by Hall et al. such as kraft paper and paper cartons, are rigid, inflexible materials not designed to stretch or bend. In direct contrast, the hot-melt adhesive of claim 70 is specifically designed to provide benefits in these areas for neck-bonded laminates. Based on the foregoing, claim 70 cannot be said to be obvious in view of the cited references.

Claims 71 and 72 are dependent upon claim 70 and are patentable for the same reasons as claim 70 set forth above, as well as for the additional elements they require.

6. Rejection of Claims 70 and 73-82 Under 35 U.S.C. §103(a)  
(¶11)

Reconsideration is requested of the rejection of claims 70-72 under 35 U.S.C. §103(a) as being unpatentable over Wang (U.S. 6,329,468) in view of Hall et al. (U.S. 3,370,106).

Claim 70 is discussed above. Also, Wang and Hall et al. are discussed above.

As stated above, a close reading of Wang clearly indicates that one skilled in the art would be guided away from combining the Wang and Hall et al. references to arrive at Applicants' invention,

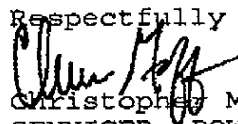
KCC 4921 (K-C 16,163)  
PATENT

as Wang teaches squarely away from the teachings in Hall et al. of a hot-melt adhesive comprising atactic polypropylene. As such, one skilled in the art would not, and could not, have been properly motivated to look at the Hall et al. reference after reading the Wang reference. Without such motivation to make the required combination, claim 70 cannot be said to be obvious.

Claims 73-82 depend from claim 70 and are patentable for the same reasons as claim 70 set forth above, as well as for the additional elements they require.

In view of the above, Applicants respectfully request favorable reconsideration and allowance of all pending claims. The Commissioner is hereby authorized to charge any fee deficiency in connection with this Letter to Deposit Account Number 19-1345 in the name of Senniger, Powers, Leavitt & Roedel.

Respectfully Submitted,

  
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